

June 19, 2019

I have some additional questions/comments for our discussion on Friday on Project Columbia.

Baseline calculations:

1. Please explain the two SO₂ rates for emission point 2610S1 on page 4 of 4 of Emission Point Form.

The two emission rates represent the projected maximum emissions and the permitted allowable emissions using the BACT emission limit.

2. NCG baseline emission factor calculations – I cannot match these, on page C-3, to the factors used in the TV renewal calculations.
 - a. Some of the new factors are higher than what was used in the TV renewal. Factors may be VOC as C vs VOC as VOC.

The VOC emission factors have been corrected to VOC as VOC in the Title V renewal.

- b. The control efficiencies used are higher than what was in TV renewal calculations.

The VOC control efficiency has been corrected to the Title V renewal efficiency of 98%.

- c. Also, the TV used a conversion from the lb/ton chips to lb/ADTP by 50%. It does not appear this was used in the baseline factor calculations. Should this change with cooking for unbleached?

The conversion is to account for the moisture in the wood chips of approximately 50%.

- d. What makes up the CO emissions for the baseline NCG rate?

The CO emission factor development has been added to the NCG calculation tab. The CO emissions are from the condensate stripper.

- e. The TV renewal used a 32.5% controlled rate for SO₂. Where does the 20% come from?

The 20 % control was applied to simplify arriving at the actual emission rate of 6.76 lb SO₂/ADTP from incinerating all pulp mill gases measured during a 2012 compliance test.

- f. The Turpentine and evaporators used 66.25% in the TV, why 20% in the c/p app?

The 20 % control was applied to simplify arriving at the actual emission rate of 6.76 lb SO₂/ADTP from incinerating all pulp mill gases measured during a 2012 compliance test.

- g. HD Tank factors – where do these come from; none of these match those in the TV for HD Storage tanks.

The HD Storage Tank TRS emission factors in the Title V renewal are found in TB 849, Table A-12, Unit PSTIE3. This is incorrectly referenced in the Title V renewal to TB858, Table A-8 which contains the HAP emission factors for the same tank. The emission rates in lb/hr were divided by the production rate of 905 ADTP/day from Table A-12 to convert the TRS emission factors into units common to the other HVLC sources. The VOC emission rate from the Title V renewal was divided by the production rate of tank PSTMO2 in Table A-8 of TB 884 (214 ODTP/day).

- h. Some of the TRS values on page C-2 are not exactly what was used in TV. Appears the last digit was dropped from being used in the c/p app.

The TRS emission factors have been updated to match the Title V renewal.

Projected Actual calculations:

1. Why was the % decrease approach used instead of NCASI factors?

The baseline emissions are based on a combination of mill-specific factors and NCASI factors so the percent decrease approach adjusts the mill-specific bleached pulp baseline emissions to unbleached pulp.

2. Linerboard VOC-TRS factors – Acrolein does not match any of the post-MACT factors on Table 5.5

The acrolein emission factor has been updated to 0.003 lb/ADTFP for the referenced post-MACT Mill B in Table 5.5.

3. WWT – my VOC calculations do not exactly match yours but will use yours. Could be some small rounding causing the difference.

This is acceptable.

Other

1. Page 16 of the app mentions no changes in monitoring, RK, or reporting with respect to MACT S. What about the VATIP? What about no longer having the Bleach Plant wrt. MACT S?

The bleach plant monitoring, recordkeeping, reporting and periodic testing requirements will no longer apply after the bleach plant is retired. The effluent limitation guidelines for bleaching systems referenced in 63.445 will no longer apply after the bleach plant is retired. The VATIP reporting requirements under 63.455 were completed after startup of the new fiberline in 2002. These requirements are not addressed in the air permit application.

Following the conversion, the condensate collection and treatment requirements in 63.446 will change, requiring a new initial performance demonstration and new Notification of Compliance Status.